

REMARKS

Applicants note that the nonstatutory obviousness-type double patenting rejection of claims 1-19 is withdrawn in view of the terminal disclaimer filed by the Applicants on November 25, 2006.

Applicants also note that the provisional double patenting rejection of claims 1-4, 6, 8, 10-14, 19-25, 27, 28 is maintained. The Examiner indicates that Applicants' statement regarding addressing the rejection once patentable subject matter has been determined has been noted.

The Examiner continues to maintain the rejection of claims 1-29 under 35 U.S.C. 103 based on *Chen et al.* in view of *Gordziel*.

With regard to the Examiner's comments regarding Applicants' obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time the later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f), or (g) prior art under 35 U.S.C. 103(a), Applicants would like to point out that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made.

The Examiner indicates that claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chen et al.* (US 6,383,471) in view of *Gordziel* (US 6,287,597).

Applicants would first like to discuss the factual errors stated by the Examiner in his description of the scope of the prior art.

The Examiner incorrectly states that *Chen et al.* disclose the general teaching of converting an active pharmaceutical ingredient such as gabapentin (column 6, line 33) into its tannate salt complex (column 11, line 50).

The Examiner conveniently omits the description of the invention in the *Chen et al.* reference which is identified repeatedly throughout the *Chen et al.* disclosure. As a starter, the very title of *Chen et al.* reads “Compositions and Methods for Improved Delivery of **Ionizable Hydrophobic Therapeutic Agents**”. The Abstract highlights that the present invention in *Chen et al.* “is directed to a pharmaceutical composition including a **hydrophobic therapeutic agent**.” The Field of the Invention states that the invention relates to drug delivery systems, ... in particular ... for **the delivery of ionizable hydrophobic compounds** The Background of the Invention discusses the problems of poor solubility associated with **hydrophobic therapeutic agents**. The Summary of the Invention indicates that an object of the present invention is to provide pharmaceutical compositions capable of solubilizing therapeutically effective amounts of **ionizable hydrophobic therapeutic agents**. The Detailed Description of the Preferred Embodiments reiterates the above statements and then at column 4, line 53, states that ionizable hydrophobic therapeutic agents are “compounds with little or no water solubility at neutral pH.” The *Chen et al.* reference then further defines the ionizable hydrophobic therapeutic agents as having solubilities of less than about 1% by weight and typically less than about 0.1% or about 0.01% by weight (see column 4, lines 55-59). For the Examiner to state that *Chen et al.* disclose the general teaching of converting an active pharmaceutical ingredient such as gabapentin into its tannate salt complex is just blatantly incorrect.

Gabapentin is not a hydrophobic therapeutic agent. Applicants have shown that the Merck Index, 13th Edition, **again attached here as Exhibit 1**, clearly defines gabapentin as having a solubility in water at pH 7.4 which exceeds 10%. Clearly, gabapentin was erroneously included in the laundry list of approximately 300 “hydrophobic therapeutic agents” in the *Chen et al.* patent. As will be discussed in further detail below, *Chen et al.* teach away from using a

hydrophilic therapeutic agent such as gabapentin to form a tannate salt and thus cannot serve to create a *prima facie* case of obviousness.

With regard to *Gordziel*, the Examiner is again factually incorrect when he states that *Gordziel* teaches a pharmaceutical composition that comprises: pyrilamine tannate, pectin, sucrose, saccharin sodium, magnesium aluminum silicate, water, glycerin, and methylparaben (column 3, Example 2). It is clear that the invention in *Gordziel* is defined as “a novel combination of **pyrilamine tannate and phenylephrine tannate**” which produces a composition having sympathomimetic decongestant and antihistaminic properties superior to the use of either one of the tannate compounds alone. See the “Abstract”, “Field of the Invention”, “The Invention” (column 2, lines 10-15) and “Claim 1”. Tablets containing the novel combination of tannates are described in Example 1 and a suspension containing the novel combination of tannates is defined in Example 2. Both the tablets and suspension compositions are described as being prepared by conventional well known compounding techniques. The use of magnesium aluminum sulphate (MAS) in Example 2 has absolutely nothing to do with the formation of either pyrilamine tannate or phenylephrine tannate in *Gordziel*. The *Gordziel* reference itself states that pyrilamine tannate and phenylephrine tannate are prepared by (1) reacting the antihistamine/decongestant free bases, e.g. phenylephrine and pyrilamine with tannic acid in the presence of a volatile solvent, usually isopropanol (see column 1, lines 60-64), or (2) alternative routes as described in U.S. Pat. Nos. 5,599,846 and 5,663,415 (see column 2, lines 4-6). Neither of the referenced patents discloses or in any way suggests the use of MAS in actually preparing the pyrilamine and phenylephrine tannate salts.

The Examiner then under the heading of “Obviousness” incorrectly refers to the invention of the present application as being a method of combining the gabapentin tannate as

described by *Chen et al.* with excipients utilized by *Gordziel* in order to prepare a pharmaceutical composition. On the contrary, the invention of the present application, as now more clearly defined in amended claim 1, is a process for preparing a gabapentin tannate to be used in a pharmaceutical composition by reacting gabapentin with tannic acid. The invention of the present application, as now defined in newly amended independent claim 6, is recited as being a process for preparing gabapentin tannate by mixing tannic acid and a dispersing agent in a solvent to obtain a dispersion and then adding gabapentin to said dispersion. Also, newly amended claim 20 now recites the invention as being a gabapentin tannate composition comprising as an active ingredient a pharmaceutically effective amount of gabapentin tannate.

In the Examiner's "Reply to Applicants' Remarks", the Examiner makes the bewildering statement that Applicants' arguments with regard to the mistaken inclusion of gabapentin as a suitable therapeutic agent is based on "the alleged definition of ionizable hydrophobic therapeutic agents" found in column 4, lines 53-57 of *Chen et al.* This is not an "alleged definition". This is the explicit definition provided by the *Chen et al.* reference. As pointed out above by the Applicants, this is the definition for the pharmaceutical active ingredients used repeatedly throughout the *Chen et al.* reference and it is established in the case law beyond any doubt that a drafter of a patent application is his own lexicographer. See MPEP §2111.01. The Examiner then indicates that Applicants' argument is not sufficient to rebut the fact that gabapentin should be listed as a hydrophobic therapeutic agent in the *Chen et al.* specification. This statement of the Examiner is even more bewildering as it is contrary to the definition of gabapentin in the "Merck Index", which is the accepted reference by the entire academic community and certainly the definitive reference for the pharmaceutical industry.

Considering now, that it is well established that the Examiner has the initial burden of presenting a *prima facie* case of obviousness, Applicants will demonstrate that the Examiner has failed to do so. The Examiner must show at least the following three elements: (1) one or more of the cited references teach the claimed invention; with a (2) reasonable expectation of success; and (3) that the combination or modification of the prior art references would have been obvious to one of ordinary skill in the art. Failure to show any one of the foregoing elements will prevent the *prima facie* case of obviousness from being established.

With regard to element (1), there is no teaching of the claimed invention in the cited references either separately or combined. *Chen et al.* teach improving the solubility of a hydrophobic therapeutic agent by adding a carrier with an ionizing agent and a surfactant. As established above, gabapentin is not a hydrophobic therapeutic agent. The *Gordziel* reference teaches that pyrilamine tannate and phenylephrine tannate, already formed tannate salts, can be combined to produce a composition having superior therapeutic properties. The present invention as defined in independent claims 1, 6 and 20, as amended, is a process (claims 1 & 6) for making a tannate salt of gabapentin and the actual gabapentin tannate salt (claim 20). Accordingly, element (1) has not been established by the Examiner.

Referring now to element (2), i.e., that there be a reasonable expectation of success, Applicants again emphasize that *Chen et al.* lists gabapentin in a laundry list of over 300 suitable hydrophobic therapeutic agents. Even assuming, *arguendo*, that gabapentin is a hydrophobic therapeutic agent, there is nothing in *Chen et al.* or *Gordziel* that indicate a likelihood of success that a gabapentin tannate could be formed. Accordingly, element (2) has not been established by the Examiner.

Applicants have established above that the *Chen et al.* reference incorrectly identified gabapentin as a hydrophobic therapeutic agent with an intrinsic water solubility of less than about 1% by weight. Consequently, one of ordinary skill in the art, knowing that gabapentin is a hydrophilic therapeutic agent, would not be motivated by *Chen et al.* to select gabapentin to combine with tannic acid to produce gabapentin tannate. Furthermore, one of ordinary skill in the art would certainly not look to *Gordziel* for excipients to use in the formation of any tannate salts of active pharmaceutical ingredients because *Gordziel* merely combines **already formed tannate salts** into a pharmaceutical composition. Thus, element (3) identified above has not been met.

It is the Examiner's position that one skilled in the art can just pick the compound of the claimed invention from the laundry list provided in *Chen et al.* Even assuming that gabapentin was a hydrophobic compound as defined by *Chen et al.*, what is conspicuously absent from the record is any substantive evidence that one of ordinary skill in the art would have been motivated to choose the presently claimed compound.

It is also the Examiner's position that one of ordinary skill in the art would have been motivated to combine the method of producing gabapentin tannate as described by *Chen et al.* with the excipients utilized by *Gordziel* in order to prepare a pharmaceutical composition. There is nothing in *Gordziel* that suggests the formation of any tannate salt of any active pharmaceutical ingredient. As indicated above, *Gordziel* merely discloses the combination of two already formed tannate salts of active ingredients to form a novel pharmaceutical composition.

Merely identifying all of the elements of a claim or their equivalents in the prior art is not sufficient to establish a *prima facie* case of obviousness. Almost all inventions are combination

of old elements, and an Examiner may often find every element of the claimed invention in the prior art. If this finding were sufficient “to negate patentability, very few patents would ever issue.” *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). Therefore, in order to establish a *prima facie* rejection for obviousness, an “Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would [**not** could] select the elements from the cited prior art references for combination in the manner claimed.

Consequently, independent claims 1, 6 and 20, as amended, and all claims depending therefrom, are patentable over the cited references, taken alone or in combination. Additionally, Applicants assert that claim 6 is patentable taking into consideration that the Examiner readily admits that *Chen et al.* do not disclose or teach the use of a dispersing agent and Applicants have already established that *Gordziel* does not disclose or teach the use of a dispersing agent **in the formation of** any tannate salts of active ingredients. Again, *Gordziel* merely uses MAS in the preparation of a suspension containing **already formed** pyrilamine tannate and phenylephrine tannate, not in the formation of either pyrilamine tannate or phenylephrine tannate. Consequently, no *prima facie* case of obviousness has been established, and Applicants respectfully request reconsideration and withdrawal of the rejection.

The Examiner further states that claims 1-29 are unpatentable over *Chen et al.* absent unexpected results. What the Examiner fails to appreciate is that unexpected results are only required to overcome a *prima facie* case of obviousness, which the Examiner has failed to establish in the present case for the reasons stated above.

With regard to the Examiner’s rejection of claims 1-4, 6,8, 10-14, 19-35, 27 and 28 as being provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of

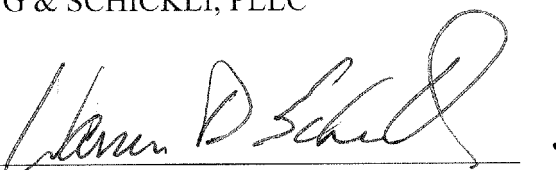
Application Serial No. 10/806,260
Response dated April 19, 2007
Reply to Final Office Action dated February 15, 2007

claims 1-16 of copending application number 10/805,806, as indicated above, Applicants have indicated that the appropriate amendments will be made once patentable subject matter has been determined.

Claims 1-29, as amended, are in form and in condition for allowance. If any additional issues remain, the Examiner is requested to contact the undersigned attorney at (859) 252-0889 to discuss same.

Respectfully submitted,

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